

USSN 09/767,150
Art Unit 2661
Amdt September 1, 2005
Reply to Office action of June 1, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1.(currently amended) A method of assembling cells in a cell relay network supporting different types of cells to provide a plurality of virtual circuits, comprising the steps of:
for each virtual circuit creating a cell template data structure representing the structure of each type of cells to be assembled for that virtual circuit, said cell template data structure including a header and a payload, said header including fields containing static information that remains the same from cell to cell for that virtual circuit, said cell template data structures further including fields for containing variable data;
storing said cell template data structures in a memory;
creating a pointer table to store the location of said cell template data structures in said memory;
using said pointer table to locate said template data structures in said memory; and
storing time division multiplex (TDM) channels in circular buffers;
storing pointers in said template data structures to said circular buffers for controlling which TDM channels are placed in said payload;
assembling said cells by retrieving said cell template data structures from said memory and inserting said TDM data therein wherein said static information remains the same for each cell in the same virtual circuit.
- 2.(cancelled)
- 3.(cancelled)
- 4.(cancelled)
- 5.(currently amended) A method as claimed in claim [[4]] 1, comprising controlling the order in which data from said circular buffers is placed in the cell payload with said circular buffer pointers.
- 6.(previously presented) A method as claimed in claim 1, comprising creating said template data structures with a program running on a central processing unit.

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- 7.(previously presented) A method as claimed in claim 1, wherein said cell relay network provides Dynamic Bandwidth Circuit Emulation Service (DBCES) with a multiframe structure, and comprising re-sizing said multiframe structure using a DBCES cell template data structure.
- 8.(previously presented) A method as claimed in claim 7, comprising partitioning the DBCES cell data structure into three major regions, namely a first region containing information that does not change when the multiframe structure is re-sized, and two regions containing information that changes during multiframe resize.
- 9.(currently amended) A method as claimed in claim [[4]] 1, comprising reading said circular buffer pointers in a round-robin fashion.
- 10.(currently amended) A device for assembling cells from a data stream for transmission over a cell relay network to provide virtual circuits, comprising:
a memory storing cell template data structures representing the structure of cells to be assembled for each virtual circuit, said cell template data structures including a header containing static information that does not change from cell to cell for a particular virtual circuit;
a pointer table for storing the location of said cell template data structures in said memory;
circular buffers containing time division multiplex channels for insertion into the assembled cells;
said cell template data structures further including pointers to said circular buffers to control which TDM channels are placed into the cell payload;
a segmentation unit for retrieving said template data structures from said memory using said pointer table and assembling cells by inserting ~~variable data~~ said TDM channels into said cell template data structures to assemble said cells.
- 11.(previously presented) A device as claimed in claim 10, wherein said memory is connected to a microprocessor controlling the operation thereof.
- 12.(cancelled)
- 13.(cancelled)

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14.(currently amended) A device as claimed in claim ~~[[13]]~~ 10, wherein the circular buffer pointers control the order in which data is placed in the cell payload.

15.(cancelled)

16.(cancelled)

17.(currently amended) A device as claimed in claim ~~[[13]]~~ 14, wherein the circular buffer pointers are read in a round robin fashion.

18.(cancelled)